

CLAIM SUMMARY DOCUMENT

The following listing of claims will replace all prior versions and listings of claims in this application.

1. (Currently Amended) A breast pump, comprising:
 - a milk container main body capable of accommodating sucked mother's milk;
 - a deformable ~~means for providing member configured to provide~~ a sealed space by contacting a breast;
 - a horn member disposed outside the deformable ~~means member~~;
 - ~~space an~~ internal ~~space~~ pressure altering ~~means for device that is configured to alternately providing provide~~ a negative pressure condition and an atmospheric pressure condition in the sealed space; and
 - a communicating portion ~~for connecting configured to connect~~ the ~~space~~ internal ~~space~~ pressure altering ~~means device~~ and the sealed space, ~~characterized in that:~~
 - ~~wherein~~ the horn member is ~~not deformed~~ ~~configured such that it does not deform~~ when internal pressure within the sealed space varies and has a base end disposed near the communicating portion, ~~an inner surface~~, and an opening end disposed near an entrance through which the breast is inserted;
 - the deformable ~~means covers member~~ is configured to cover the inner surface of the horn member, ~~deforms to deform~~ when internal pressure within the sealed space varies, and has an attachable and detachable portion which is attachable to and detachable from the horn member;
 - the attachable and detachable portion has a base end side attachable and detachable portion ~~configured~~ to be fixed to the base end of the horn member and an opening side attachable and detachable portion ~~configured~~ to be fixed to the opening end of the horn member;
 - the deformable ~~means member~~ has a stimulating convex projecting inwardly;
 - the stimulating convex is disposed between the base end side attachable and detachable portion and the opening side attachable and detachable portion; and

the horn member has an atmospheric pressure condition creating ~~means for maintaining~~ structure configured to maintain an atmospheric pressure condition in a space between the stimulating convex and the horn member.

2. (Currently Amended) A breast pump as set forth in claim 1, ~~characterized in that~~ wherein the stimulating convex of the deformable ~~means member~~ is disposed in ~~the~~ a vicinity of a curvature altering portion where a curvature of the base end of the horn member ~~alters~~ changes.

3. (Currently Amended) A breast pump as set forth in claim 1 ~~or 2, characterized in that~~ wherein the base end side attachable and detachable portion of the deformable ~~means member~~ is disposed between the communicating portion and the base end of the horn member.

4. (Currently Amended) A breast pump as set forth in ~~any one of claims 1 through 3,~~ claim 1, wherein the atmospheric pressure condition creating ~~means~~ structure is a vent opening ~~for connecting that connects~~ a space between the horn member and the deformable ~~means member~~ with ~~the outside~~ atmosphere exterior to the breast pump.

5. (Currently Amended) A breast pump as set forth in ~~any one of claims 1 through 4,~~ claim 1, wherein a deformation guide portion ~~for regulating that is~~ configured to regulate a deformation direction of the deformable ~~means member~~ is provided on the deformable ~~means member~~.

6. (Currently Amended) A breast pump as set forth in claim 5, ~~characterized in that:~~ wherein

the stimulating convex is provided at a plurality of positions within the deformable ~~means~~ member, and at least some of these stimulating convexes are opposed to each other on a first virtual line; and

the deformation guide portion is disposed on a second virtual line which crosses the first

virtual line connecting the stimulating convexes provided ~~to oppose~~ in opposition to each other.

7. (New) A breast pump as set forth in claim 2, wherein the base end side attachable and detachable portion of the deformable member is disposed between the communicating portion and the base end of the horn member.

8. (New) A breast pump as set forth in claim 2, wherein the atmospheric pressure condition creating structure is a vent opening that connects a space between the horn member and the deformable member with atmosphere exterior to the breast pump.

9. (New) A breast pump as set forth in claim 3, wherein the atmospheric pressure condition creating structure is a vent opening that connects a space between the horn member and the deformable member with atmosphere exterior to the breast pump.

10. (New) A breast pump as set forth in claim 7, wherein the atmospheric pressure condition creating structure is a vent opening that connects a space between the horn member and the deformable member with atmosphere exterior to the breast pump.

11. (New) A breast pump as set forth in claim 2, wherein a deformation guide portion that is configured to regulate a deformation direction of the deformable member is provided on the deformable member.

12. (New) A breast pump as set forth in claim 3, wherein a deformation guide portion that is configured to regulate a deformation direction of the deformable member is provided on the deformable member.

13. (New) A breast pump as set forth in claim 4, wherein a deformation guide portion that is configured to regulate a deformation direction of the deformable member is provided on

the deformable member.

14. (New) A breast pump as set forth in claim 7, wherein a deformation guide portion that is configured to regulate a deformation direction of the deformable member is provided on the deformable member.

15. (New) A breast pump as set forth in claim 8, wherein a deformation guide portion that is configured to regulate a deformation direction of the deformable member is provided on the deformable member.

16. (New) A breast pump as set forth in claim 9, wherein a deformation guide portion that is configured to regulate a deformation direction of the deformable member is provided on the deformable member.

17. (New) A breast pump as set forth in claim 10, wherein a deformation guide portion that is configured to regulate a deformation direction of the deformable member is provided on the deformable member.

18. (New) A breast pump as set forth in claim 11, wherein
the stimulating convex is provided at a plurality of positions within the deformable member, and at least some of these stimulating convexes are opposed to each other on a first virtual line; and

the deformation guide portion is disposed on a second virtual line which crosses the first virtual line connecting the stimulating convexes provided in opposition to each other.

19. (New) A breast pump as set forth in claim 12, wherein
the stimulating convex is provided at a plurality of positions within the deformable member, and at least some of these stimulating convexes are opposed to each other on a first

virtual line; and

the deformation guide portion is disposed on a second virtual line which crosses the first virtual line connecting the stimulating convexes provided in opposition to each other.

20. (New) A breast pump as set forth in claim 13, wherein
the stimulating convex is provided at a plurality of positions within the deformable member, and at least some of these stimulating convexes are opposed to each other on a first virtual line; and

the deformation guide portion is disposed on a second virtual line which crosses the first virtual line connecting the stimulating convexes provided in opposition to each other.

21. (New) A breast pump as set forth in claim 14, wherein
the stimulating convex is provided at a plurality of positions within the deformable member, and at least some of these stimulating convexes are opposed to each other on a first virtual line; and

the deformation guide portion is disposed on a second virtual line which crosses the first virtual line connecting the stimulating convexes provided in opposition to each other.

22. (New) A breast pump as set forth in claim 15, wherein
the stimulating convex is provided at a plurality of positions within the deformable member, and at least some of these stimulating convexes are opposed to each other on a first virtual line; and

the deformation guide portion is disposed on a second virtual line which crosses the first virtual line connecting the stimulating convexes provided in opposition to each other.

23. (New) A breast pump as set forth in claim 16, wherein
the stimulating convex is provided at a plurality of positions within the deformable member, and at least some of these stimulating convexes are opposed to each other on a first

virtual line; and

the deformation guide portion is disposed on a second virtual line which crosses the first virtual line connecting the stimulating convexes provided in opposition to each other.

24. (New) A breast pump as set forth in claim 17, wherein

the stimulating convex is provided at a plurality of positions within the deformable member, and at least some of these stimulating convexes are opposed to each other on a first virtual line; and

the deformation guide portion is disposed on a second virtual line which crosses the first virtual line connecting the stimulating convexes provided in opposition to each other.